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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,505	12/31/2003	Denise J. Nelson	17,858.2	1813
23556	7590	03/12/2008		
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EXAMINER				
TAWFIK, SAMEH				
ART UNIT		PAPER NUMBER		
3721				
MAIL DATE		DELIVERY MODE		
03/12/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/750,505

**Applicant(s)**

NELSON ET AL.

**Examiner**

Sameh H. Tawfik

**Art Unit**

3721

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-19, 21, 22, 35-39, 41-46 and 48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-19, 21, 22, 35-39, 41-46 and 48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20071030.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10-19, 21, 22, 35-39, 41-46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kao (JP 10-095,481).

Kao discloses a method of folding a disposable absorbent article (Fig. 2), the article having an initial upper surface, an initial lower surface, a longitudinal centerline, a transverse centerline, opposing first longitudinal side edges opposing first transverse end edges and an unfolded configuration (Figs. 1 and 7), the method of folding comprising forming one fold extending in a transverse direction (Figs. 6 and 7) by bringing a portion of the initial upper surface into a facing relationship with another portion of the initial upper surface, the one fold being spaced between opposing first transverse end edges (Figs. 6 and 7), the resulting partially-folded article having an intermediate first surface, an intermediate second surface and opposing second transverse end edges, and thereafter forming a number, greater than one, of transversely extending folds in an accordion-like manner (Fig. 6), the transversely extending accordion-like folds being spaced between opposing second transverse end edges (Fig. 6), and thereby forming a folded article having a folded configuration area and an unfolded configuration area (Figs. 5-7).

Kao does not disclose that a ratio between the folded configuration area and an unfolded configuration area of no more than 0.14, 0.08, and/or no more than 0.04. However, Kao

discloses unfolded and folded article as shown in Figs. 5-7 and a ration between a folded configuration and the unfolded configuration via thickness of no more than 0.15, see for example the English translation of Kao; paragraph 0019 “If the thickness ratio becomes less than 15%, the diaper becomes hard and the texture worsens.”; *note that in t he filed specification of the invention; ;age 11, lines 20-22, applicants point out to the ratio of being “0.15; alternatively, no more than 0.14;” which is obvious that the exact ratio is not that critical and could be 0.15.*

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Kao’s method by having the ratio to be no more than 0.14, 0.08, and/or 0.04 between the folded and unfolded area as seen in Figs. 5-7, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claims 2 and 13: wherein the number of accordion-like transverse extending folds is an even number (Fig. 6).

Regarding claims 3, 14, and 26: wherein the number of accordion-like transverse extending folds is 2 (Fig. 6).

Regarding claims 4, 15, and 27: wherein the one fold extending in a transverse direction is locate substantially adjacent the transverse centerline (Fig. 6).

Regarding claims 5, 16, and 28: wherein the accordion-like transverse extending folds are spaced substantially equally between opposing second transverse end edges (Fig. 6).

Regarding claims 7, 11, 18, and 22: the folded article is an infant diaper (Figs. 5-7).

Regarding claims 8 and 17: wherein the accordion-like transversely extending folds are spaced substantially equally between opposing second transverse end edges (Fig. 6).

Regarding claim 12: Kao discloses the step of forming at least one longitudinally extending fold in each side margin by folding each first longitudinal side edge inward toward the initial upper surface and thus bringing a portion of the initial upper surface into facing relationship with another portion of the initial upper surface (Fig. 5; via longitudinal folds).

Regarding claims 36 and 43: the number of transversely extending accordion-like folds is an odd number (Fig. 6).

Regarding claim 37: Kao does not disclose that the accordion-like folds are odd number greater than 4. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Kao's accordion-like folds to be more than 4 folds, in order to reduce the packaging space length wise, since it has been held that mere duplication of the essential parts involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Alternatively, it would have been an obvious matter of engineering design choice to have modified Kao's accordion-like folds to be more than 4 folds, in order to reduce the packaging space, since applicant has not disclosed that 5 folds solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Kao's folds as shown in Fig. 6.

Regarding claims 39 and 46: Kao discloses that the transversely extending accordion-like folds are spaced substantially equally between opposing first transverse end edges, see for example (Fig. 6).

Regarding claims 41 and 48: Kao discloses that the folded article is an infant diaper (Figs. 2, 5, 6, and 7).

***Response to Arguments***

Applicant's arguments filed 01/14/2008 have been fully considered but they are not persuasive.

Applicants argue that the applied reference of Kao '481 discloses a compressing an absorbent article to decrease the thickness of the articles, such articles may or may not be folded. On the contrary to the present invention compares between the folding and unfolding ratio. Applicants argue that the folding of the present invention and the compression of Kao are not equivalent.

The examiner maintains that the applied reference of Kao '481 discloses what is broadly been claimed on the present invention, as Kao clearly discloses a ratio of *packaging structure* of disposable diaper (English translation; paragraph 0019, lines 1-8), while the packaging structure been described as "disposable diaper 2 is individually wrapped and packed by aforementioned packaging material 30. In this case, *disposable diaper 2 is folded from bottom to top*" (English translation; paragraph 0017, lines 1-5). In another word, the diaper had to be folded in order to be wrapped and packed to come up with the disclosed ratio.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is 571-272-4470. The examiner can normally be reached on Tuesday - Friday from 9:00 AM to 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sameh H. Tawfik/  
Primary Examiner, Art Unit 3721

ST.